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30. External electrodes according to Claim 28, wherein the basic metallization is composed of a suitable termination paste that has the composition  $\text{Ag}_x\text{Pd}_y$ , where  $x + y = 1$  and  $1 > x > 0$ , but preferably  $1 > x > 0.7$ .

31. External electrodes according to Claim 27, wherein the structure of the basic metallization is formed by a porous electrochemical deposition of a suitable metallic material.

32. External electrodes according to Claim 31, wherein the metallic material is nickel.

33. External electrodes according to Claim 27, wherein the structure of the basic metallization is composed of areas disposed over the surface of the actuator and in that the areas are at least large enough for respective adjacent internal electrodes to be joined together by at least one area.

34. External electrode according to Claim 27, wherein the structure of the basic metallization is composed of dots, in that the diameter of the dots is equal to 0.05 to 5 times the thickness of the ceramic layers of the actuator, in that the minimum distance between the dots is likewise equal to 0.5 to 5 times the thickness of the ceramic layers of the actuator, and in that a straight line extending through the dots encloses an angle with respect to the path of the internal electrodes that is approximately between 10 degrees and 80 degrees, preferably between 15 degrees and 40 degrees.

35. External electrode according to Claim 34, wherein the diameter of and the spacing between the dots are equal to two to three times the thickness of the ceramic layer of the actuator.

36. External electrode according to Claim 27, wherein the structure of the basic metallization is composed of parallel lines, in that the width of the lines is equal to 0.5 to 5 times the thickness of the ceramic layers of the actuator, in that the minimum distance between the lines is likewise equal to 0.5 to 5 times the thickness of the ceramic layers of the actuator, and in that the lines enclose an angle with respect to the path of the internal electrodes that is approximately between 10 to 80 degrees, preferably between 15 degrees to 40 degrees.

37. External electrodes according to Claim 36, wherein the width of and the spacing between the lines are equal to 2 to 3 times the thickness of the ceramic layers of the actuator.

38. External electrodes according to Claim 27, wherein the structure of the basic metallization is composed of lines disposed in grid-type manner, in that the width of the lines is equal to 0.5 to 5 times the thickness of the ceramic layers of the actuator, in that the

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minimum distance between the lines is likewise equal to 0.5 to 5 times the thickness of the ceramic layers of the actuator, and in that the lines of the grid are at a random angle with respect to one another and to the path of the internal electrodes.

39. External electrodes according to Claim 38, wherein the width of and the spacing between the lines are equal to 2 to 3 times the thickness of the ceramic layers of the actuator.

40. External electrodes according to Claim 39, wherein the joining layer between the metallization and reinforcing layer is composed of a solder that contains at least one of the metals Sn, Ag, Cu, Pb, Au, In, Ga.

41. External electrodes according to Claim 40, wherein the solder is a tin-containing material, preferably  $\text{SnAg}_4$  or  $\text{SnCu}_{0.7}$ .

42. External electrodes according to Claim 27, wherein the joining layer between basic metallization and reinforcing layer is an electrically conductive adhesive.

43. Method for producing external electrodes according to Claim 27, wherein the layer of the basic metallization is structured by discontinuities and recesses.

44. Method according to Claim 43, wherein the structure of the basic metallization is produced as a printed pattern by means of a printing method using a suitable termination paste.

45. Method according to Claim 44, wherein the structure of the basic metallization is formed by a mechanical, chemical or electrochemical removal in a layer of the basic metallization applied over the entire area.

46. Method according to Claim 43, wherein the basic metallization is produced from a suitable termination paste that has the composition  $\text{Ag}_x\text{Pd}_y$ , where  $x + y = 1$  and  $1 > x > 0$ , but preferably  $1 > x > 0.7$ .

47. Method according to Claim 43, wherein the structure of the basic metallization is formed by a porous electrochemical deposition of a suitable metallic material.

48. Method according to Claim 47, wherein nickel is used as metallic material.

49. Method according to Claim 43, wherein the structure of the basic metallization is formed from areas distributed over the surface of the actuator and in that areas are produced that are at least large enough for respectively adjacent internal electrodes to be joined together by at least one area.

50. Method according to Claim 27, wherein the reinforcing layer is soldered onto the basic metallization, and in that the solder contains at least one of the metals Sn, Ag, Cu, Pb, Au, In, Ga.

51. Method according to Claim 50, wherein the solder is a tin-containing material, preferably SnAg<sub>4</sub> or SnCu<sub>0.7</sub>.

52. Method according to Claim 50, wherein that metal from the solder is alloyed into the internal electrodes by the discontinuities in the structure of the basic metallization, and in that the ceramic material is weakened at these points, as a result of which preferred points are formed for possible crack formation and the crack path.

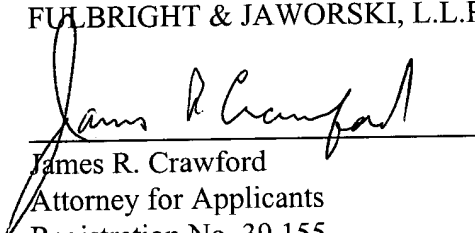
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REMARKS

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Respectfully submitted,

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